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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/444,221 11/19/99 MURPHY

B 17634-000513

EXAMINER

HM22/0209

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ART UNIT	PAPER NUMBER
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1642

DATE MAILED:

02/09/01

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No. <b>09/444,221</b>	Applicant(s) <b>Murphy et al.</b>
	Examiner <b>Brenda Brumback</b>	Group Art Unit <b>1642</b>

Responsive to communication(s) filed on \_\_\_\_\_.

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 1 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

#### Disposition of Claims

Claim(s) 1-62 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

Claim(s) \_\_\_\_\_ is/are allowed.

Claim(s) \_\_\_\_\_ is/are rejected.

Claim(s) \_\_\_\_\_ is/are objected to.

Claims 1-62 are subject to restriction or election requirement.

#### Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been  received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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**DETAILED ACTION**

***Election/Restriction***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-17, 19, 21, 29, 39, 47-54, 59, 61, and 62, drawn to isolated RSV with attenuating temperature sensitive mutations, methods of use and methods of making, classified in class 411, subclass 211.1.
  - II. Claims 1, 11, 22-25, 29, 30, 36, 37, 49, 51, 54, 55, 58, and 60, drawn to RSV/PIV chimeric viruses, classified in class 424, subclass 199.1.
  - III. Claims 26-28, 35, and 39-46, drawn to isolated RSV modified to ablate or modulate expression of a SH, NS1, NS2, or G gene, classified in class 424, subclass 211.1.
  - IV. Claims 26, 32, 39-46, 49, 51, and 58, drawn to human/non-human chimeric RSV, classified in class 424, subclass 211.1.
  - V. Claims 1, 11, 18, and 38-46, drawn to isolated RSV modified by introduction of a termination codon or in a GS or GE transcription signal, classified in class 424, subclass 211.1.
  - VI. Claims 1, 11, 20, 26, 29-31, 33, 34, 39, 49, 51, 56, 58, drawn to human RSV chimeric viruses of different subgroups, classified in class 424, subclass 211.1.

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Note: Claims which appear in more than a single group will be examined with the elected group to the extent that they read on that group.

2. The inventions are distinct, each from the other because of the following reasons: The RSV of Groups I-VI are different products with different structures and different immunological properties.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their different classification and/or their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

4. This application contains claims directed to the following patentably distinct species of the claimed invention:

Recombinant RSV with a point mutation specifying a temperature-sensitive amino acid substitution at Phe<sub>521</sub>,

Recombinant RSV with a point mutation specifying a temperature-sensitive amino acid substitution at GLN<sub>831</sub>,

Recombinant RSV with a point mutation specifying a temperature-sensitive amino acid substitution at Met<sub>1169</sub>,

Recombinant RSV with a point mutation specifying a temperature-sensitive amino acid substitution at Tyr<sub>1321</sub>,

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Recombinant RSV with an attenuating mutation specifying a temperature-sensitive amino acid substitution in the gene-start sequence of gene M2,

Recombinant RSV with a deletion in a gene specifying a phenotype change in growth characteristics,

Recombinant RSV with a deletion in a gene specifying a phenotype change for small plaque size,

Recombinant RSV with a deletion in a gene specifying a phenotype change in attenuation,

Recombinant RSV with a deletion in a gene specifying a phenotype change in temperature sensitivity,

Recombinant RSV with a deletion in a gene specifying a phenotype change in cold-adaptation,

Recombinant RSV with a deletion in a gene specifying a phenotype change in host range restriction.

Recombinant RSV with a deletion in a gene specifying a phenotype change in immunogenicity,

Recombinant RSV with a modification in an SH gene,

Recombinant RSV with a modification in an NS1 gene,

Recombinant RSV with a modification in an NS2 gene,

Recombinant RSV with a modification in a G gene,

Recombinant RSV with a modification to a cis-acting regulatory sequence,

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Recombinant RSV with a modification to encode a cytokine,  
Recombinant RSV with a modification to encode a T-helper epitope,  
Recombinant RSV with a modification to encode a restriction site marker,  
Recombinant RSV with a modification to encode a protein of a microbial pathogen,  
RSV strain *cpts* RSV 248,  
RSV strain *cpts* RSV 248/404,  
RSV strain *cpts* RSV 248/955,  
RSV strain *cpts* RSV 530,  
RSV strain *cpts* RSV 530/1009,  
RSV strain *cpts* RSV 530/1030,  
RSV strain RSV B-1 *cp52/2B5*, and  
RSV strain RSV B-1 *cp-23*.

5. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.
6. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon,

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including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

7. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

8. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any

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amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Brumback whose telephone number is (703) 306-3220. If the examiner can not be reached, inquiries can be directed to Supervisory Patent Examiner Anthony Caputa whose telephone number is (703) 308-3995. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Examiner Brenda Brumback, Art Unit 1642 and should be marked "OFFICIAL" for entry into prosecution history or "DRAFT" for consideration by the examiner without entry. The Art Unit 1642 FAX telephone number is (703)-305-3014. FAX machines will be available to receive transmissions 24 hours a day. In compliance with 1096 OG 30, the filing date accorded to each OFFICIAL fax transmission will be determined by the FAX machine's stamped date found on the last page of the transmission, unless that date is a Saturday, Sunday or Federal Holiday with the District of Columbia, in which case the OFFICIAL date of receipt will be the next business day.

BB

February 8, 2001

*Brenda Brumback*  
Brenda Brumback,  
Patent Examiner